

characterized in that

said substrate structure (1) is a singulated part, particularly a stamped part, made from a panel-shaped or strip-shaped metal sheet, particularly a lead frame.

6. The arrangement as recited in claim 1,

characterized in that

said substrate structure (1) is in thermal contact with a coolant, particularly water, which flows around or across at least a portion of its surface.

9. The arrangement as recited in claim 1,

characterized in that

said optical waveguide (8) is provided on both of its longitudinal faces with a coating, particularly a SiO₂ coating, for beam guidance.

10. The arrangement as recited in claim 1,

characterized in that

an optical waveguide structure creating a plurality of individual optical waveguides is formed in said waveguide (8).

12. The arrangement as recited in claim 1,

characterized in that

to effect the optical coupling of said optical waveguide (8) to said light-emitting power semiconductor device (3), a particularly reflective or diffractive lens is provided in the beam path between said power semiconductor device (3) and said optical waveguide (8).

14. The arrangement as recited in claim 1,

characterized in that

said transparent plastic material is silicone.

15. The arrangement as recited in claim 1,

characterized in that

10 said light-emitting power semiconductor device (3) is a semiconductor laser, particularly a semiconductor laser bar.

18. The method as recited in claim 16,
characterized in that
as part of the fourth step, a projecting piece (16) of plastic material integrally formed on said plastic protective body is broken off to expose said light exit surface of said optical waveguide (8).

19. The method as recited in claim 16,
characterized in that
after said fourth step, the exposed light exit surface of said optical waveguide (8) is polished.--.